

Document delivery in business information

Richard Poynder

Assesses the advantages of the different methods of document delivery now available and describes what the major suppliers have to offer information professionals.

With static or falling information budgets, rising information costs and an increase in consumer choice as a result of the introduction of new technology, document delivery has become a live issue. And as is often the case when traditional ways of doing things are undergoing a period of change, the subject is surrounded with some confusion. This makes it an appropriate moment for *Business Information Review* to examine the current situation.

• What is document delivery?

In effect, document delivery is nothing more than a cluster of methods for ordering and delivering information, with a strong emphasis on new technology, flexibility of sourcing and speed of response. Document delivery services are available for most types of business information, including company information; product information; market and investment research; newsletters and journals; and government and EC information.

These services are delivered in a variety of formats, some traditional, some new: original documentation; tear-sheet services; copies of documentation; and delivery by electronic methods like fax, CD-ROM and online.

Librarians have been supplying documents as part of their job for years, utilising facilities such as the inter-library loan service. In fact, the British Library's document delivery service grew out of the old National Lending Library, which, in the early days, specialised in lending science journals and books. As photocopiers became available the library began to copy documents as well as lend them; and, as demand has grown, the document delivery service at Boston Spa has increasingly looked to service the business community as well.

Currently, one third of all requests originate from business people. And as new technologies have been introduced, so has the speed and variety of methods by which the British Library receives requests for (and delivers) documents. Currently, some 58% of the British Library's requests come in by a variety of what it terms Automated Request

ABOUT THE AUTHOR

The author until recently worked in the Marketing Department of British Telecom Business Information Services, which is responsible for promoting a portfolio of online databases via BT Messaging Services. He now works as a freelance writer, specialising in electronic information services.

Transmission (ARTTel) methods, including online database systems, fax, telex and telephone.

Likewise, Companies House has been a major supplier of company information for over 100 years. Until 1988, however, when it became an Executive Agency, company searches could only be made by visiting one of the search rooms, or by making a postal request.

Following its change of status, Companies House launched a series of initiatives to make its information services more accessible, with the introduction of a number of new ordering and delivery methods including fax, courier and online services. This included a policy of making the information available more quickly, with the launch of a new premium service - offering a guaranteed twenty minute turnaround time.

Recent years have also seen a growing number of independent document delivery services springing up. These have developed in response to consumer needs for faster access to documents; for tailored services offering specialist information; and for indexing services that not only deliver information, but help identify relevant sources.

• The impact of technology

In effect, then, document delivery is information resourcing by another name. What is different is the number and variety of new methods of supplying that information - often by utilising new technology. And these new services have brought with them large benefits in terms of flexibility and speed.

Below we look at some of the recent technological developments that are impacting on the ordering and delivery of business information.

Document delivery by CD-ROM

One area that has seen considerable growth is that of document delivery by means of CD-ROM. With their enhanced storage capacity, CD-ROMs allow users to search on large in-house full-text databases. This becomes particularly advantageous when image-scanning is involved and users are able to view and print out page-images including graphs, diagrams, charts and photographs.

Companies like ARK are now marketing CD-ROMs that hold thousands of company, industry and economic reports. Disclosure is utilising image scanning and CD-ROM technology to produce discs with large databases of company annual reports held as scanned images.

The ADONIS initiative supplies over 450 biomedical-related journals on weekly-updated CD-ROMs, with article pages stored as bit-mapped graphic images. Although

mainly covering the life sciences at present, other subject areas are planned and we can expect to see a number of new business applications being developed in the future.

Online document ordering and delivery

Another area of continuing development is the provision of documents via online systems. With information providers like Predicasts and Reuters increasingly providing the full-text of articles online, we can expect to see more and more users printing documents directly from an online service, rather than waiting for hard-copy delivery. The move to charging users on a document-basis, rather than for online time, will further encourage this development.

Of course, this is not a solution for documents that contain diagrams and illustrations. To meet this need, however, online hosts like DIALOG and Data-Star have begun to offer online ordering systems, allowing users to make online requests for documents identified in their searches.

Integrated document delivery services

A more recent development, and one which exemplifies the process of convergence that is taking place in business information provision, is the combination of online services with more traditional document delivery services. Known as CASIAS, these combine current awareness services in the shape of databases containing the full-text of journal contents pages, with an individual article supply service.

CASIAS services can be expected to bring further benefits in delivery time, allowing relevant articles to be quickly identified by the user and then ordered online for rapid despatch by fax or, in the future, by electronic means.

The first initiative of this kind, UnCover, was launched by CARL Systems Inc, an organisation based in Colorado, USA. UnCover received little attention outside North America until last September, when CARL agreed a joint venture with B H Blackwell, the international book and journal distributor, to develop the service.

The venture creates a combined current awareness and document delivery service that will involve the expansion of the present UnCover file from 11,500 titles to 20,000 and the creation of a rapid electronic delivery mechanism for the supply of documents over public and private networks.

This, combined with a number of similar initiatives by organisations as diverse as Faxon Research Services and the British Library will go some way to automate and speed up the identification, selection and delivery of single articles - and a growing number of business applications can be expected to develop from such initiatives.

The electronic library

As delivery mechanisms become more flexible and speed of delivery more rapid, consumers of business information are increasingly able to utilise just-in-time methods for the delivery of information.

In practice, this means being able to cut down on the amount of hard-copy sources held in favour of the electronic library principle - where access is available to a wide range of

information sources able to deliver small units of information, quickly and on a pay-as-you-use basis.

And the pace of change is likely to continue for the foreseeable future - the next logical development is in the field of network publishing, where electronic publications will be made available over high speed, interconnected national networks. This opens up a world in which documents may only ever be published in electronic format.

As we shall see below, while these new developments offer more flexibility, consumers need to undertake close analysis of the comparative costs of alternative information sources in order to make the most of them.

• Issues for business information users

Apart from the question of technology, document delivery raises a number of issues for users of business information.

Price

The question of price can be stated quite simply: against a background in which business information is generally experiencing price inflation, and in a recessionary climate where budgets are under increasing pressure, how does the information professional best use the money available to meet the information needs of his clients or organisation?

In the case of business librarians this is a serious issue and involves choices that exemplify just-in-time principles. Choices like:

- deciding between taking out a subscription to a journal that can be used *ad infinitum*, or obtaining copies of articles from the journals on a case-by-case basis as members request them.

- choosing whether to buy expensive market research reports, or access the relevant sections online as and when they are required

- deciding whether to pay a large subscription for an image-database CD-ROM containing thousands of company annual reports or buy the originals as and when required.

As can be seen, such decisions require the buyer to establish the relative costs of various information sources, based upon the frequency with which the information is needed: for instance, if a journal with a subscription costing hundreds of pounds is only likely to be used a handful of times it is likely to be cheaper to buy articles from it on a one-off basis, as and when required.

For consultants and information brokers similar choices have to be made. Depending on the client's budget, information can be obtained from a variety of sources, at varying prices. However, it is often the case that these decisions are less crucial for consultants and brokers, as they are able to pass the costs on to their clients.

Speed

Speed is another important factor in the equation. As an example, if a company search is required it is possible to visit Companies House and purchase a report on paper or

microfiche, at a cost of £3. Alternatively, a search can be ordered by post for £5 or by fax for £20. Or an instant company report could be obtained by logging onto an online system and sending it directly to a printer, at varying costs dependent upon the database chosen and the type of report selected.

Similarly, if it is necessary to order an article from the British Library the consumer can choose between a number of options. For instance, one could use the Standard Service, costing £3.95 per article and with delivery by post; or one could use the Urgent Action Service, with delivery by fax at £15.80.

Quality

Another factor in the choice of delivery may well be quality. If the document required contains small, intricate diagrams, a copy may not be adequate. In this case the consumer may prefer to obtain an original document, either on loan or by means of a tear sheet service like Anbar or the Institute for Scientific Information.

Similarly, with company information: both ARK and Disclosure operate a company annual report delivery service. ARK prides itself on delivering the original document; Disclosure, however, supplies copies. Depending on the purpose for which the report is required a copy may be sufficient. Or it may be preferred to obtain the original.

With the development of on-site CD-ROM products some of the problems associated with not being able to download documents with graphs and diagrams can be overcome - particularly where image-scanning technology is used and good quality full-image pages can be printed in their original layout.

Thus, to meet the business information needs of his company or client the information professional now has a much wider range of flexible choices, but will need to carefully consider three vital factors: time, cost and quality.

Copyright

Under the Copyright Act 1988 the copying of documents is only permitted without prior consent of the copyright owner in a number of limited circumstances. For instance, educational establishments are given some defined copying privileges. As are non-profit-making prescribed libraries.

It is as prescribed libraries that organisations like the British Library and the Institute of Management are able to supply copying services without charging royalties, under the "fair dealing" principle. This privilege gives them some competitive advantage over commercial organisations, who dare not sell copied information without entering into royalty arrangements with the copyright owners.

Clearly, though, the use of copied information in the business environment has obvious copyright implications. Certainly, anyone using a document delivery service cannot re-copy documents received without contravening the Copyright Act - unless they have the copyright owner's permission or it is clearly information that is in the public domain.

The only information that can be considered to be in the public domain is information whose author has been dead for 50 years or information where the copyright owner has expressly given permission for unlimited copying. As an example, the authors of advertising material are unlikely to object to it being copied.

Online users should also bear in mind the copyright implications of extracting information from databases. Unless they have an agreement with the database host, or information producer, that specifically allows them to take multiple copies, or in any way engage in the onward transmission of their search results, either on paper or electronically, they must assume that the most they can do is view the information on-screen, or save the search to disc for the exclusive purpose of printing one single copy.

- **Services available**

Listed below are some of the key providers of document delivery services in the field of business information, with a description of the services they offer and some indication of their charges.

AIRS

American Information Retrieval Services (AIRS) specialises in the provision of information from the US Government, including the Department of Defense, the US Government Printing Office and the Department of Commerce. It also supplies original documents from the European Community, including the 12 individual European countries, the European Commission, the European Parliament and the European Council of Ministers.

The price of the service is variable. On top of any costs charged by the information source is added the AIRS service charge. For the normal service this ranges from between £29 to £59 per document (on a sliding scale related to the price charged by the source), with delivery within four weeks. The rush service is charged at between £25 and £37, plus the cost of the document - with delivery between one to three weeks. There are discounts for regular users of the service and for those prepared to enter into subscription or standing order arrangements.

Further information: Robert Norbury, AIRS, 5 Elveston Mews, London SW7 5HY. Tel. 071-225 2799. Fax 071-225 1230.

Anbar

The Anbar service abstracts selected articles from over 300 management journals. These are published as 7 separate Anbar journals, each covering a specific management area. Customers pay £340 for each journal of abstracts (£1,700 for the complete set). There are ten editions a year. Full-text copies of articles of interest can then be borrowed - or purchased for £3.50 per article - and are sent by first class post. Fax delivery is possible, but not encouraged. Articles can also be purchased by non-subscribers, at a cost of £5.25. The journals are also available on floppy disc, at £1,799.95, and compact disc at £1,999.95.

Further information: Lynn Coulton, Anbar, 62 Toller Lane, Bradford, West Yorkshire BD8 9BY. Tel. 0274 480916. Fax 0274 543576.

ARK

ARK offers an on-demand service providing annual reports from companies around the world. ARK prides itself on the quality of the documents it supplies and, with the exception of its 8,000 US annual reports, most of them are originals, although copies can be requested. Originals cost £17.95 per report and copies £14.95.

Additionally, ARK can provide pages of stockbroker reports. There are over 45 participating brokers, with a strong emphasis on Northern Europe. These cost between £2.95 and £4.95 per page.

The reports are also available on a CD-ROM product called The Research Bank. This operates a sliding scale subscription where users can either pay an annual fee of £10,000 for unlimited usage, or £300 deposit plus, by means of a metering system, £2.50 per page printed.

Further information: Gary Halliwell, ARK, 11 New Fetter Lane, London EC4A 1JN. Tel. 071-815 3800. Fax 071-815 3857.

BioCommerce Data

BioCommerce Data maintains a database of company news and financial information, as well as scientific and market data concerning the commercial applications of biotechnology. The database includes over 84,000 abstracts from a wide range of specialist newsletters and is available on both DIALOG and Data-Star.

Documents cannot be ordered online. However, BioCommerce Data has launched its own document delivery service, which provides copyright cleared documents at prices ranging from £7 per document (irrespective of length) for postal delivery, £15 for delivery by fax and £35 by courier.

Further information: Anita Crafts-Lighty, BioCommerce Data, Prudential Buildings, 95 High Street, Slough, Berks SL1 1DH. Tel. 0753 511777. Fax 0753 512239.

British Library

The British Library is far and away the biggest supplier of documents in the world. It stocks seven million documents, including 220,000 journal titles, 500,000 theses, 300,000 conference reports, three million books and countless items of "grey literature".

A range of different document delivery services is available, including the Standard Service, with delivery by first class post; the Urgent Action Service, with documents sent by first class post, fax or courier; the Copyright Cleared Service, which includes a royalty payment; and the Lexicon Service, which requires no pre-registration and includes a mandatory copyright fee.

Depending on the service and the delivery method chosen prices range from between about £3.95 and £17.32 per document. With the exception of the Lexicon service, payment is operated by a form system, which means you need to order and pre-pay for at least 20 forms (£79.30-£109.51) before you can use most of the services.

Documents can also be ordered via a number of online hosts, including Blaise, ESA/IRS, DIALOG and Data-Star.

Further information: Customer Services, British Library Document Supply Centre, Boston Spa, Wetherby, West Yorkshire LS23 7BQ. Tel. 0937 546051. Fax 0937 546333.

Companies House

Companies House holds the public records of more than one million live companies and registers about four million documents each year. One of its primary roles is to provide information on companies to the public. In order to fulfil this role the organisation has supplied documents since 1855.

In the last four years a number of new services have been launched, including telephone ordering, fax delivery, a courier service and an online ordering service.

In addition a number of new regional centres have been opened in Glasgow, Leeds, Birmingham and Manchester and a new Premium Service has been launched - providing guaranteed delivery of a microfiche within 20 minutes for those attending one of the search rooms.

Companies House can provide a wide range of information on companies. In the vast majority of cases, however, customers simply want a company search. This provides three years annual returns and accounts and other key documents, including Articles of Association and mortgage details.

Search results are available on microfiche or paper and cost £3 if collected or £5 if sent by post. Fax delivery is possible, but at a cost of £20 per document it can be an expensive option for those requiring more than one document. The premium service costs £20. Customers can now also order searches via the online service. This is accessed through the Mercury network and costs £40 to register, with a £40 annual charge and online connect charges of 30-40p per minute.

Online users can order searches for personal collection or delivery by post or fax. They can also view an online company history screen for £1. This consists of a company's registered details and a list of documents submitted by that company since May 1986.

There are future plans to provide a number of other online services, including direct access to detailed information on directors and company mortgages and charges.

Further information: Central Enquiries, Companies House, Crown Way, Cardiff CF4 3UZ. Tel. 0222 380801. Fax 0222 380900.

Disclosure

Disclosure provides a variety of information on publicly trading companies, world-wide. This includes annual reports from any country, London Stock Exchange filings and filings made to the US Securities and Exchange Commission. Currently information is available on over 3,000 UK companies and 12,000 US companies, with more than 40,000 reports on over 10,000 companies in 47 countries.

All annual reports cost £18. Other prices range from £16 for a Stock Exchange filing to £20 for a *10-K Annual Report* to SEC. Documents are normally sent by messenger (charged at £6.50 in Central London), offering delivery within two hours.

For users with heavy information needs, Disclosure offers a range of image products, including LaserD International, a full-image database of over 10,000 international annual reports. These allow unlimited usage on a subscription basis - starting at £16,500. Disclosure also runs a FAXINDEX service, which provides a daily index of London Stock Exchange Announcements, delivered by fax. The subscription costs £290.

The Disclosure database is also available on a number of hosts, including Mead, DIALOG and Data-Star. However, documents cannot be ordered online.

Further information: Janet Gilbert, Disclosure, 26-31 Whiskin Street, London EC1R 0BP. Tel. 071-278 7848. Fax 071-278 3898.

FT Business Research Centre

The Financial Times Business Research Centre is the largest information broker in the country, offering a comprehensive portfolio of information services, including company, industry, statistical, current affairs and biographical information.

The research centre was the first information broker to reach agreement with research organisations like Datamonitor and MSI to supply their customers with individual chapters and pages from market research reports.

Since then a lot of research reports have been put online and, if pressed, research companies themselves will now sell chapters or pages of their own reports. However, concerns regarding loss of income are likely to mean that research companies will remain reluctant to sell individual sections of their reports on any formalised basis.

Thus the FT Business Research Centre remains an important supplier of sections of market research reports. Prices vary but, on average, cost about £10 per page. Use of the Research Centre is primarily on a membership basis, but *ad hoc* information services are available and charged on the basis of hourly research time.

Further information: Tim Birchinall, Financial Times Business Research Centre, Number One Southwark Bridge, London SE1 9HL. Tel. 071-873 3000. Fax 071-873 3069.

The Institute of Management

The Institute of Management - formed by the recent merger of the British Institute of Management and the Institution of Industrial Managers, - offers a number of its information services to non-members, including access to the seven IM Management Information Databases, with 61,000 records (mainly abstracts) covering UK, US and European management journals, books, courses, training packages, conference papers and audio visual training material. All seven databases have also been made available on a CD-ROM product. Registration to the online service costs £100 and the annual subscription ranges between £225 and £1,000 (plus VAT) depending on usage levels.

A document delivery service is available to support both the online service and the CD-ROM product, with users able to make telephone and fax orders for copies of journal articles for delivery by post at £5 (plus VAT) per article. Fax delivery costs £1 per sheet extra.

Further information: Bob Norton, The Institute of Management, Management House, Cottingham Road, Corby, Northants NN17 1TT. Tel. 0536-204222. Fax 0536-201651.

Institute of Personnel Management

The Institute of Personnel Management has also recently made many of its library services available to non-members. This includes a Database Search facility where members of the library will undertake customised keyword searches on any personnel issue, and provide a

list of all references, up to 150 hits. This is supplemented by a document delivery service with full-text articles delivered by first class post at £5 per article and an additional £2 per sheet for fax delivery.

Further information: Marilyn Arnott, Head of Library and Information Services, Institute of Personnel Management, IPM House, Camp Road, Wimbledon, London SW19 4UX. Tel. 081-946 9100 (ext. 287). Fax 081-947 2570.

Institute for Scientific Information

The Institute for Scientific Information (ISI) runs a document delivery service called the Genuine Article - a name chosen to underline the fact that, in most cases, it provides tear sheets, with the customer sent the original article ripped out of the publication, rather than a photocopy.

The Genuine Article provides document support to ISI's range of current awareness indexes, *Current Contents*. These are available in a number of media, including hardcopy, floppy disc, and CD-ROM. In addition, they can be accessed via a number of online hosts - including DIALOG, DIMDI and STN - where users can place online document orders.

ISI's prices operate on a sliding scale, dependent upon the customer's willingness to agree to a minimum annual commitment. These range from \$11.70 per article for the first 10 pages and \$2.60 for each subsequent 10 pages for their Open Account (no commitment to order more than one article) to \$7.50 (regardless of page numbers) for an annual pre-paid Contract Account, where the customer has committed to more than 10,000 articles.

ISI offers a twenty four hour service, with delivery by first class mail (or airmail), fax or courier. Fax delivery incurs additional charges and ranges from \$9 per article for a contract account to \$10 for an open account.

Further information: Robert Kimberley, Institute for Scientific Information, 132 High Street, Uxbridge UBB 1DP. Tel. 0895 270016. Fax 0895 256710.

Perfect Information

Perfect Information is the only company providing an online image service, with access offered to an optically-stored database of financial documents, stockbrokers' research and regional, national and international press.

The service is primarily accessed by means of a dedicated line, although it is also possible to make document requests by means of the telephone network and BT's GNS service, with delivery to a dedicated printer or by fax.

The database is available twenty four hours a day, allowing users to view and print out information as required. Announcements are made available on the service within minutes of their release from the London Stock Exchange; and circulars and Reports and Accounts are input within one hour.

Perfect Information also provides an historical archive going back, in some cases, to 1982. Currently there are some 350,000 documents, with the database growing by about 1,000 documents each weekday.

Charges for unlimited use of the service range from £3,000pa for the annual reports and accounts service, £6,000 for new issue documents and £10,000 for company announcements. The information is also available on a pay-as-you-go basis, with Reports

and Accounts costing £14 each, announcements £3, press clippings £1.50 and foreign reports £30.

Further information: Martin Howell, Perfect Information, Michael House, 35 Chiswell Street, London EC1Y 4SE. Tel. 071-454 0666. Fax 071-454 0668.

Scanfax

HMSO's Scanfax service provides fax delivery of official EC documentation. This includes The Official Journal L, C and S series and COM Documents. The service costs 50p per page, with a minimum charge of £4 (including VAT and fax costs).

Further information: Peter Raggett, HMSO Publications Centre (PC51E), 51 Nine Elms Lane, London SW8 5DR. Tel. 071-873 8220. Fax 071-873 8416.

Statfax

The Central Statistical Office's Statfax service provides twenty four hour access to the latest macro-economic statistics.

Using the service you can have headline figures delivered to your fax machine within a couple of minutes of the official release time of 11.30 am. And shortly thereafter, the entire press notice is available - including tables and graphs.

There is no registration or subscription. The service costs 36p per minute cheap rate and 48p per minute at all other times.

Virtually any fax machine can be used to poll the following numbers:

Retail prices index	0336 416037
Monthly trade figures	0336 416038
Balance of payments	0336 416039
Public sector borrowing requirement	0336 416040
Index of production	0336 416041
Producer prices	0336 416042
Retail sales index	0336 416043
Credit business	0336 416044
Gross domestic product	0336 416045
Economic statistics release dates	0336 416046

Further information: Public Inquiry Service, Central Statistical Office, Room 65c/3, Great George Street, London SW1P 3AQ. Tel. 0336 416050.

UMI

UMI, the producer of the ABI/Inform database, operates an Article Clearinghouse service. This can provide copies of articles from over 14,000 publications, including 800 ABI/Inform business and management journals and publications like *The Economist*, *Business Week* and *Asia Pacific Business*.

Documents can be ordered by telephone, post, fax and online (including Dialog and BRS). Although currently direct orders can only be placed by contacting UMI's American office, in Michigan, UMI are looking to launch a UK-based service this year.

There are a number of services, from the Standard Service (turnaround within two working days and shipment within four), Rush 1st Class (same day processing and shipment) and fax delivery (same day processing and faxing).

Articles cost \$12.50 each, with an airmail surcharge of \$2.50. Fax delivery is \$26.50 per article, plus \$2.50 per page over 20 pages. There are discounts for account holders, dependent upon the number of articles ordered per year.

UMI also offers a portfolio of CD-ROM products. Of particular interest to the business market is the Business Periodicals Ondisc product, which has nearly 450 business and management journals available in full-text image. The product includes a subscription to ABI/Inform, which serves as an index to the full text.

Subscription to Business Periodicals Ondisc costs \$19,950pa and includes a metering facility to enable information departments to bill their customers for documents printed off. A further service from UMI, General Periodicals Ondisc, includes a full-image CD-ROM database of over 200 general interest periodicals, including *Business Week*, *Business Month* and *Time*. The disc costs \$12,000pa.

Further information: Susan Orchard, UMI, Information Publications International, White Swan House, Godstone, Surrey RH9 8LW. Tel. 0883 744123. Fax 0883 744024. 300 North Zeeb Road, Ann Arbor, Michigan, USA. Tel. 010-1 313 761 4700.

• Conclusion

Document delivery, then, is nothing more than a cluster of methods for ordering and delivering information. Many of these methods utilise new technology in order to enhance the speed with which information can be delivered to the customer, which reduces the need for consumers to maintain large libraries of hard copy documentation and encourages *just-in-time* information practices.

It's clear that the new technologies represent a significant challenge to journal publishers who, in order to survive, will need to adapt to a world in which their revenues are based on the payment of royalties, rather than from subscriptions.

Already image database technology (with its accompanying increase in the speed with which information can be delivered) is being held back by some publishers withholding permission for document delivery agents to hold scanned images of their publications in electronic form.

These issues, however, primarily affect publishers of journals. The image databases made available by companies like Disclosure and Perfect Information are as advanced as they are because the copyright issues are not so controversial.

What is clear is that the future promises a world in which image databases and electronically published documents will provide the consumer with desktop access to high quality documents on a wide range of subjects, with the ability to call them up and print them off as and when they are needed. The only question is the speed with which these new technologies are made available.

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